



December 11, 2012

Mr. Mike Sundberg
New York State Department of Environmental Conservation
Office of Environmental Quality, Region 5
232 Hudson Street, Post Office Box 220
Warrensburg, New York 12885-0220

Regarding: Queensbury, New York – Air Permit Update

Dear Mr. Sundberg:

Enclosed is a copy of Sterigenics - Queensbury, New York air permit and air permit application. Both have been edited to reflect the current operation. You will find edits on the following pages of the air permit:

Cover Page	Correction to company name and address change to company contact.
Page 1	Correction to company name.
Page 18	Item 29.1: Change from 12 to 11 sterilization rooms and from 5 to 6 aeration rooms.
Page 20	Item 33.1: <ul style="list-style-type: none">▪ Change from 12 to 11 sterilization chambers;▪ Emission Source/Control: S0004- Process Design Capacity, change from 1,155 cubic feet to 1,200 cubic feet;▪ Delete Emission Source/Control: S0005 – decommissioned in 2004.
Page 21	Continuation of Item 33.1: <ul style="list-style-type: none">▪ Emission Source/Control: S0009 – Process Design Capacity, change from 1,155 cubic feet to 1,200 cubic feet;▪ Emission Source/Control: S0010, Change to S000B – Process Design Capacity, change from 1,155 cubic feet to 1,200 cubic feet;▪ Emission Source/Control: S0011, Change to S000C;▪ Emission Source/Control: S0012, Change to S000D;▪ Emission Source/Control: S0013, Change to S000E. Item 33.2: Change from 12 to 11 sterilization rooms.
Page 22	Continuation of Item 33.2: <ul style="list-style-type: none">▪ Emission Source/Control: S0004- Process Design Capacity, change from 1,155 cubic feet to 1,200 cubic feet;▪ Delete Emission Source/Control: S0005 – decommissioned in 2004.▪ Emission Source/Control: S0009 – Process Design Capacity, change from 1,155 cubic feet to 1,200 cubic feet;▪ Emission Source/Control: S0010, Change to S000B – Process Design Capacity, change from 1,155 cubic feet to 2,996 cubic feet;▪ Emission Source/Control: S0011, Change to S000C;▪ Emission Source/Control: S0012, Change to S000D;▪ Emission Source/Control: S0013, Change to S000E. Item 33.3: <ul style="list-style-type: none">▪ Change from 5 to 6 aeration rooms▪ Emission Source/ Control: A0004 – Process Design Capacity, change from 11,340 cubic feet to 11,718 cubic feet.



Page 23	<p>Continuation of Item 33.3:</p> <ul style="list-style-type: none">▪ Emission Source/Control: A0007, Change to A0001 – Process Design Capacity, change from 97,200 cubic feet to 125,963 cubic feet;▪ Emission Source/Control: A0008 – Process Design Capacity, change from 97,200 cubic feet to 78,000 cubic feet;▪ Add Emission Source/Control: A0007 – Process, Design Capacity: 3,764 cubic feet.
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Complementary edits are also applied to the air permit application enclosed. Please let me know if you have any questions of need to discuss any of the amended items. You can reach me at 630.928.1768 (office) or 847.924.4977 (mobile).

Kind Regards,

Susan M. Reinhardt
Manager
Environment, Health and Safety

Enclosures: Queensbury, New York Air Permit – with edits
2000 Queensbury, New York Air Permit Application – with edits

Pc: Justin Fitzpatrick, General Manager

New York State Department of Environmental Conservation
Facility DEC ID: 5534400029



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 5-5344-00029/00011
Effective Date: 04/05/2000 Expiration Date: No expiration date

Permit Issued To: STERIGENICS ~~EO INC~~ U.S. LLC
2015 SPRING RD
OAK BROOK, IL 60523

Contact: KATHLEEN A HOFFMAN, Sr. Vice President EH&S
~~2313 MARBLEWOOD DRIVE~~ 2015 Spring Road, Suite 650
~~PLANO, TX 75093~~ Oakbrook, Illinois 60523
~~(972) 519-9217~~ phone: 630. 928. 1758 fax: 630. 928. 1701

Facility: STERIGENICS ~~EO INC~~ U.S. LLC
84 PARK RD
QUEENSBURY, NY 12804

Description:

This facility is a sterilization facility. Medical instruments, cosmetics and pharmaceuticals are placed in chambers which are filled with ethylene oxide gas or propylene oxide gas. After sterilization, the gases are exhausted through control devices and the products are removed to aeration rooms which are also vented through control devices.

Ethylene oxide is regulated by 40 CFR 63 subpart O (Ethylene Oxide Emissions Standards for Sterilization Facilities) and 6NYCRR Part 212 (General Process Emission Sources). Propylene Oxide is regulated only under Part 212.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Per THOMAS W HALL

DIVISION OF ENVIRONMENTAL PERMITS
ROUTE 86 PO BOX 296
RAY BROOK, NY 12977-0296

Authorized Signature: _____ Date: ____ / ____ / ____

FINAL



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

New York State Department of Environmental Conservation
Facility DEC ID: 5534400029



LIST OF CONDITIONS

GENERAL CONDITIONS

General Provisions

Facility Inspection by the Department

Relationship of this Permit to Other Department Orders and Determinations

Applications for Permit Renewals and Modifications

Permit Modifications, Suspensions, and Revocations by the Department

Facility Level

Submission of Applications for Permit Modification or Renewal -REGION 5
SUBOFFICE



DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301.2(m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for Permit Renewals and Modifications
Applicable State Requirement: 6NYCRR 621.13(a)

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Condition 4: Permit Modifications, Suspensions, and Revocations by the Department
Applicable State Requirement: 6NYCRR 621.14

New York State Department of Environmental Conservation
Facility DEC ID: 5534400029



Item 4.1:

The Department reserves the right to modify, suspend, or revoke this permit. The grounds for modification, suspension or revocation include:

- a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
- b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
- c) new material information is discovered; or
- d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.

****** Facility Level ******

Condition 5: Submission of Applications for Permit Modification or Renewal -REGION 5
SUBOFFICE
Applicable State Requirement: 6NYCRR 621.5(a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 5 Sub-office
Division of Environmental Permits
232 Hudson St, PO Box 220
Warrensburg, NY 12885-0220
(518) 623-1281

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: STERIGENICS ~~EO, INC~~ U.S., LLC
2015 SPRING RD , Suite 650
OAK BROOK, IL 60523

Facility: STERIGENICS ~~EO, INC~~ U.S. LLC
84 PARK RD
QUEENSBURY, NY 12804

Authorized Activity By Standard Industrial Classification Code:
7389 - BUSINESS SERVICES, NEC

Permit Effective Date: 04/05/2000

Permit Expiration Date: No expiration date.



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6NYCRR 200.5: Sealing
 - 2 6NYCRR 200.6: Acceptable ambient air quality
 - 3 6NYCRR 200.7: Maintenance of equipment
 - 4 6NYCRR 201-1.2: Unpermitted Emission Sources
 - 5 6NYCRR 201-1.4: Unavoidable Noncompliance and Violations
 - 6 6NYCRR 201-1.5: Emergency Defense
 - 7 6NYCRR 201-1.7: Recycling and Salvage
 - 8 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the Air
 - 9 6NYCRR 201-1.10(a): Public Access to Recordkeeping
 - 10 6NYCRR 201-3.2(a): Proof of Eligibility
 - 11 6NYCRR 201-3.3(a): Proof of Eligibility
 - 12 6NYCRR 202-1.1: Required emissions tests
 - 13 6NYCRR 211.3: Visible emissions limited.
 - 14 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- Emission Unit Level**

EU=1-11111

- 15 6NYCRR 200.6: Compliance Demonstration
- 16 6NYCRR 200.6: Compliance Demonstration
- 17 40CFR 63.363, Subpart O: Compliance Demonstration
- 18 40CFR 63.364(b)(2), Subpart O: Compliance Demonstration
- 19 40CFR 63.364(c), Subpart O: Compliance Demonstration
- 20 40CFR 63.366(a)(3), Subpart O: Compliance Demonstration

EU=1-11111,Proc=S01

- 21 6NYCRR 212.4(a): Compliance Demonstration
- 22 6NYCRR 212.4(a): Compliance Demonstration

EU=1-11111,Proc=S02

- 23 6NYCRR 212.4(a): Compliance Demonstration
- 24 40CFR 63.362(e)(1), Subpart O: Compliance Demonstration

EU=1-11111,Proc=S03

- 25 6NYCRR 212.4(a): Compliance Demonstration
- 26 40CFR 63.362(d), Subpart O: Compliance Demonstration

EU=1-11112

- 27 6NYCRR 227-1.3(a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 Facility DEC ID: 5534400029



Facility Level

- 28 6NYCRR 201-5: General Provisions
- 29 6NYCRR 201-5: Emission Unit Definition
- 30 6NYCRR 201-5.3(b): Contaminant List
- 31 6NYCRR 211.2: Air pollution prohibited

Emission Unit Level

- 32 6NYCRR 201-5: Emission Point Definition By Emission Unit
- 33 6NYCRR 201-5: Process Definition By Emission Unit



FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

Condition 1: Sealing
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.5

Item 1.1:

(a) The commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the commissioner issued in the case of the violation. Sealing means labelling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

(b) No person shall operate any air contamination source sealed by the commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

(c) Unless authorized by the commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section

Condition 2: Acceptable ambient air quality
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.6

Item 2.1:

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the commissioner shall specify the degree and/or method of emission control required.

Condition 3: Maintenance of equipment
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.7

Item 3.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.



Condition 4: Unpermitted Emission Sources
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.2

Item 4.1:

If an existing emission source was subject to the permitting requirements of 6NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Condition 5: Unavoidable Noncompliance and Violations
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.4

Item 5.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

- (a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit or certificate issued for the corresponding air contamination source. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.
- (b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

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of the emission rates.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

Condition 6: Emergency Defense

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.5

Item 6.1:

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Condition 7: Recycling and Salvage

Effective between the dates of 04/05/2000 and Permit Expiration Date



Applicable Federal Requirement: 6NYCRR 201-1.7

Item 7.1:

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Condition 8: Prohibition of Reintroduction of Collected Contaminants to the Air
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.8

Item 8.1:

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Condition 9: Public Access to Recordkeeping
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.10(a)

Item 9.1:

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1) , and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

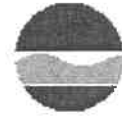
Condition 10: Proof of Eligibility
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-3.2(a)

Item 10.1:

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Condition 11: Proof of Eligibility



Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-3.3(a)

Item 11.1:

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Condition 12: Required emissions tests

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 202-1.1

Item 12.1:

An acceptable report of measured emissions shall be submitted, as may be required by the commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6NYCRR Part 202-1.

Condition 13: Visible emissions limited.

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 211.3

Item 13.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 14: Open Fires Prohibited at Industrial and Commercial Sites

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 215

Item 14.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 Facility DEC ID: 5534400029



****** Emission Unit Level ******

Condition 15: Compliance Demonstration
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.6

Item 15.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 15.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The rolling annual usage of ethylene oxide shall not exceed 550,000 pounds per year.

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 16: Compliance Demonstration
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.6

Item 16.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):

CAS No: 000075-56-9 PROPANE, 1,2-EPOXY-

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The rolling annual usage of propylene oxide shall not exceed 6000 pounds per year.

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 Facility DEC ID: 5534400029



Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 17: Compliance Demonstration
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.363, Subpart O

Item 17.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):
CAS No: 000075-21-8 ETHYLENE OXIDE

Item 17.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
The owner or operator shall conduct an initial performance test using the test methods listed in 40 CFR 63.365. The test must be completed not later than 31 March 2000.

Lower Permit Limit: 99 percent reduction by weight
Reference Test Method: EPA Method 18
Monitoring Frequency: SINGLE OCCURRENCE
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 18: Compliance Demonstration
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.364(b)(2), Subpart O

Item 18.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):
CAS No: 000075-21-8 ETHYLENE OXIDE

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029



Item 18.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Measure and record once per week the level of the scrubber liquor in the recirculation tank. The owner or operator shall install, maintain and use a liquor level indicator to measure the scrubber liquor tank level. The maximum liquor tank level will be established during the initial testing.

Monitoring Frequency: WEEKLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2000.

Subsequent reports are due every 6 calendar month(s).

Condition 19: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.364(c), Subpart O

Item 19.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall continuously monitor and record the oxidation temperature at the outlet of the catalyst bed. The baseline oxidation temperature will be established during initial testing.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2000.

Subsequent reports are due every 6 calendar month(s).



New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029

Condition 20: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.366(a)(3), Subpart O

Item 20.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator shall submit a semiannual monitoring system performance report. Reports of exceedences of control system parameters shall include information required in 40 CFR 63.10(c).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2000.

Subsequent reports are due every 6 calendar month(s).

Condition 21: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 21.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S01

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 21.2:

Compliance Demonstration shall include the following monitoring:

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 Facility DEC ID: 5534400029



Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The exhaust from the evacuation of the sterilization chambers shall be directed through a control device which achieves at least 99.9% control. Initial testing should be concurrent with testing required under 40CFR 63 Subpart O. Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Lower Permit Limit: 99.9 percent reduction by weight

Reference Test Method: EPA Method 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 22: Compliance Demonstration
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 22.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S01

Regulated Contaminant(s):

CAS No: 000075-56-9 PROPANE, 1,2-EPOXY-

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The exhaust from the evacuation of the sterilization chambers shall be directed through a control device that achieves 99.9% control of ethylene oxide emissions.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Parameter Monitored: ETHYLENE OXIDE

Lower Permit Limit: 99.9 percent reduction by weight

Reference Test Method: EPA Method 18

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL



New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029

CHANGE

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 23: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 23.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S02

Regulated Contaminant(s):

CAS No: 000075-56-9 PROPANE, 1,2-EPOXY-

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The exhaust from backventing sterilization chambers shall
be directed through a control device which achieves at
least 99% control of ethylene oxide emissions

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL
CHANGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 24: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.362(e)(1), Subpart O

Item 24.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S02

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 24.2:



New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The exhaust from backventing sterilization chambers shall be directed through a control device which achieves 99% control. Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Lower Permit Limit: 99 percent reduction by weight

Reference Test Method: EPA Method 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 25: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(a)

Item 25.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S03

Regulated Contaminant(s):

CAS No: 000075-56-9 PROPANE, 1,2-EPOXY-

Item 25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The exhaust from the aeration rooms shall be directed through a control device which achieves at least 99% control of ethylene oxide emissions.

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

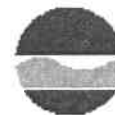
Condition 26: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029



Applicable Federal Requirement: 40CFR 63.362(d), Subpart O

Item 26.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11111

Process: S03

Regulated Contaminant(s):

CAS No: 000075-21-8 ETHYLENE OXIDE

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The exhaust from the aeration rooms shall be directed through a control device which shall achieve 99% control or reduce the concentration to a maximum of 1 ppmv (whichever is less stringent). Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Lower Permit Limit: 99 percent reduction by weight

Reference Test Method: EPA Method 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 27: Compliance Demonstration

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 227-1.3(a)

Item 27.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-11112

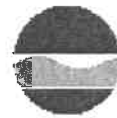
Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 Facility DEC ID: 5534400029



No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test method 9 in Appendix A of 40 CFR 60.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

Condition 28: General Provisions
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 28.1:

This section contains terms and conditions that are not federally enforceable and are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of Section 201-6.4 of Part 201.

Item 28.2:

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

Item 28.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Condition 29: Emission Unit Definition
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 29.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-11111

Emission Unit Description:

THIS EMISSION UNIT CONSISTS OF ~~12~~ 11
STERILIZATION ROOMS, 5 AERATION ROOMS TWO
EMISSION CONTROL DEVICES AND 1 EMISSION
POINT.

Building(s): PLANT

Item 29.2:



New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-11112

Emission Unit Description:

FOUR 12MMBTU/HR NATURAL GAS FIRED HEATERS
HEAT THE WAREHOUSE.

Condition 30: Contaminant List

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5.3(b)

Item 30.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000075-21-8

Name: ETHYLENE OXIDE

CAS No: 000075-56-9

Name: PROPANE, 1,2-EPOXY-

Condition 31: Air pollution prohibited

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 211.2

Item 31.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

****** Emission Unit Level ******

Condition 32: Emission Point Definition By Emission Unit

Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 32.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-11111

New York State Department of Environmental Conservation
Permit ID: 5-5344-00029/00011 **Facility DEC ID: 5534400029**



Emission Point: 11111
Height (ft.): 78

Diameter (in.): 12

Building: PLANT

Condition 33: Process Definition By Emission Unit
Effective between the dates of 04/05/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 33.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-11111

Process: S01

Source Classification Code: 3-15-020-01

Process Description:

EVACUATION OF STERILIZATION CHAMBERS.
THERE ARE 12 STERILIZATION CHAMBERS WHICH
ARE CHARGED WITH ETHYLENE OXIDE GAS OR
PROPYLENE OXIDE GAS TO STERILIZE MEDICAL
EQUIPMENT, COSMETICS, SPICES OR
PHARMACEUTICALS. AT THE END OF THE
STERILIZATION PERIOD, THE GAS IS PUMPED OUT
THROUGH A WET ACID SCRUBBER.

Emission Source/Control: SCRUB - Control
Control Type: WET SCRUBBER

Emission Source/Control: S0001 - Process
Design Capacity: 1,155 cubic feet

Emission Source/Control: S0002 - Process
Design Capacity: 1,155 cubic feet

Emission Source/Control: S0003 - Process
Design Capacity: 1,333 cubic feet

Emission Source/Control: S0004 - Process
Design Capacity: 1,155 cubic feet → 1,200

~~Emission Source/Control: S0005 - Process~~ Delete
~~Design Capacity: 1,333 cubic feet~~

Emission Source/Control: S0006 - Process
Design Capacity: 347 cubic feet

Emission Source/Control: S0008 - Process

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029

Design Capacity: 347 cubic feet

Emission Source/Control: S0009 - Process

Design Capacity: ~~1,155~~ cubic feet ^{1,200}

Emission Source/Control: S0010^B - Process

Design Capacity: ~~1,333~~ cubic feet ^{2,996}

Emission Source/Control: S0011^C - Process

Design Capacity: 1,333 cubic feet

Emission Source/Control: S0012^P - Process

Design Capacity: 1,333 cubic feet

Emission Source/Control: S0013^E - Process

Design Capacity: 1,333 cubic feet

Item 33.2:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-11111

Process: S02

Source Classification Code: 3-15-020-01

Process Description:

¹¹
EXHAUSTING STERILIZATION CHAMBERS. THERE ARE ~~12~~ STERILIZATION CHAMBERS WHICH ARE CHARGED WITH ETHYLENE OXIDE OR PROPYLENE OXIDE TO STERILIZE MEDICAL EQUIPMENT, COSMETICS, SPICES OR PHARMACEUTICALS. AFTER THE STERILIZATION PERIOD AND EVACUATION CYCLES OF PROCESS S01 ARE COMPLETED, THE CHAMBER VACUUM IS BROKEN AND THE CHAMBER IS VENTED THROUGH A CATALYTIC OXIDIZER.

Emission Source/Control: CATOX - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: S0001 - Process
Design Capacity: 1,155 cubic feet

Emission Source/Control: S0002 - Process
Design Capacity: 1,155 cubic feet

Emission Source/Control: S0003 - Process
Design Capacity: 1,333 cubic feet

Emission Source/Control: S0004 - Process

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029



Design Capacity: ~~1,155~~ cubic feet → 1,200

Emission Source/Control: ~~S0005 - Process~~ Delete
Design Capacity: ~~1,333~~ cubic feet

Emission Source/Control: S0006 - Process
Design Capacity: 347 cubic feet

Emission Source/Control: S0008 - Process
Design Capacity: 347 cubic feet

Emission Source/Control: S0009 - Process
Design Capacity: ~~1,155~~ cubic feet → 1,200

Emission Source/Control: S001^B~~0~~ - Process
Design Capacity: ~~1,333~~ cubic feet → 3,996

Emission Source/Control: S001^E~~1~~ - Process
Design Capacity: 1,333 cubic feet

Emission Source/Control: S001^D~~2~~ - Process
Design Capacity: 1,333 cubic feet

Emission Source/Control: S001^E~~3~~ - Process
Design Capacity: 1,333 cubic feet

Item 33.3:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-11111

Process: S03

Source Classification Code: 3-15-020-01

Process Description:

AERATION ROOM VENTING. THERE ARE 6
AERATION ROOMS WHERE PRODUCTION MATERIALS
ARE STAGED AFTER STERILIZATION. THE
MATERIALS OFFGAS ETHYLENE OXIDE OR
PROPYLENE OXIDE FOR AN APPROPRIATE PERIOD
OF TIME AND THE ROOMS ARE EXHAUSTED THROUGH
A CATALYTIC OXIDIZER.

Emission Source/Control: CATOX - Control
Control Type: CATALYTIC AFTERBURNER

Emission Source/Control: A0004 - Process
Design Capacity: ~~11,340~~ cubic feet → 11,718

Emission Source/Control: A0005 - Process

New York State Department of Environmental Conservation

Permit ID: 5-5344-00029/00011

Facility DEC ID: 5534400029



Design Capacity: 11,340 cubic feet

Emission Source/Control: A0006 - Process

Design Capacity: 11,340 cubic feet

Emission Source/Control: A000¹~~7~~ - Process

Design Capacity: ~~97,200~~ cubic feet

125,963

Emission Source/Control: A0008 - Process

Design Capacity: ~~97,200~~ cubic feet

78,000

Item 33.4: **Add: Emission Source / Control: A0007 - Process, Design Capacity: 3764 cu.f**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-11112

Process: B01

Process Description: HEATING THE WAREHOUSE.

Emission Source/Control: 11121 - Combustion

Design Capacity: 12 million Btu per hour

Emission Source/Control: 11122 - Combustion

Design Capacity: 12 million Btu per hour

Emission Source/Control: 11123 - Combustion

Design Capacity: 12 million Btu per hour

Emission Source/Control: 11124 - Combustion

Design Capacity: 12 million Btu per hour

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS ~~CO INC~~ U.S. LLC

Oct 30, 2012 9:42 am

Section I - Certification

Title V Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information [required pursuant to 6 NYCRR 201-6.3(d)] I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official

Title

Signature

Date

State Facility Certification

I certify that this facility will be operated in conformance with all provisions of existing regulations.

Responsible Official

Title

Signature

Date

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS ~~EO INC~~ U.S. LLC

Oct 30, 2012 9:42 am

Section II - Identification Information

Permit Type:	<input checked="" type="checkbox"/> Air State Facility (ASF)
	<input type="checkbox"/> RENEWAL
General Permit Title:	
<input type="checkbox"/> Application involves construction of new facility	<input type="checkbox"/> Application involves construction of new emission unit(s)

Owner / Firm

Name	STERIGENICS EO INC U.S. LLC		
Street	2015 SPRING RD, Suite 650		
City	OAK BROOK	State	IL
		Country	USA
		Zip	60523
Owner Classification	Corporation/Partnership		Taxpayer Id
			133334955

Facility

Name	STERIGENICS EO INC U.S. LLC		
Address	84 PARK RD		
City	QUEENSBURY	Zip	12804

Owner / Firm Contact Mailing Address

Name	KATHLEEN A HOFFMAN	Phone No.	9725409217
Affiliation	Sterigenics	Fax No.	9727400204
Title	Sr. V.P. EHS		
Street	2813 MARBLEWOOD DRIVE 2015 Spring Road, Suite 650		
City	PLANO OAK BROOK	State	IL
		Country	USA
		Zip	75093

630.928.175
630.920.175

60523

Project Description

Application for renewal of Air State Facility.

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS ECHO, U.S. LLC

Oct 30, 2012 9:42 am

Section III - Facility Information

Classification

☒ COMMERCIAL

SIC Codes

7389

Facility Description

THIS FACILITY IS A CONTRACT STERILIZATION PLANT THAT STERILIZES MEDICAL EQUIPMENT, PHARMACEUTICALS, COSMETICS AND SPICES FOR OTHER COMPANIES. THE PLANT CURRENTLY HAS TEN STERILIZERS AND FOUR AERATION ROOMS. THIS PERMIT APPLICATION WILL ADD TWO ADDITIONAL STERILIZERS AND AN AERATION ROOM. THE FACILITY USES BOTH ETHYLENE OXIDE (CAS#00075218) AND PROPYLENE OXIDE (CAS#00075569) TO STERILIZE PRODUCT. THE MAXIMUM AMOUNT OF THE ETO AND PO IS 550,000 # /YR AND 6000 #/YR RESPECTIVELY. SINCE THE USAGE OF ETO IS MUCH GREATER AND HAS GREATER FEDERAL REQUIREMENTS (INCLUDING MACT RULE), ALL EMISSION RATES DETAILED IN THIS APPLICATION WILL BE FOR ETHYLENE OXIDE.

Compliance Statements (Title V Only)

I certify that as of the date of this application the facility is in compliance with all applicable requirements ☐ YES ☐ NO
If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application (the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block of section IV of this form along with the compliance plan information required. For all emission units at this facility that are operating in compliance with all applicable requirements complete the following:

- ☐ This facility will continue to be operated and maintained in such manner as to assure compliance for the duration of the permit, except those units referenced in the compliance plan portion of Section IV of this application.
- ☐ For all emission units, subject to any applicable requirements that will become effective during the term of the permit, this facility will meet all such requirements on a timely basis.
- ☐ Compliance certification reports will be submitted at least once a year. Each report will certify compliance status with respect to each requirement, and the method used to determine status.

Facility State Only Requirements

Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	201	5							

Facility Emissions Summary

Cas No.	Contaminant Name	PTE		Actual (lbs/yr)
		(lbs/yr)	Range	
000630-08-0	CARBON MONOXIDE		D	
000075-21-8	ETHYLENE OXIDE	798		
0NY100-00-0	HAP		A	
0NY210-00-0	OXIDES OF NITROGEN		D	
0NY075-00-0	PARTICULATES		A	
0NY075-00-5	PM-10		A	
000075-56-9	PROPANE, 1,2-EPOXY-	9		
007446-09-5	SULFUR DIOXIDE		A	
0NY998-00-0	VOC		A	

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS CO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Description

Emission Unit	111111
---------------	--------

THIS EMISSION UNIT CONSISTS OF 12 STERILIZATION ROOMS, 5 AERATION ROOMS TWO EMISSION CONTROL DEVICES AND 1 EMISSION POINT.

Building

Building	Building Name	Length	Width	Orient.
PLANT	THE ENTIRE PLANT LOCATION			

Emission Point

Emission Unit	111111	Emission Pt.	111111			
Ground Elev (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp (°F)	Cross Section	
					Length (in)	Width (in)
350	78	46	12	145		
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal
167	7850	613.455	4800.14	PLANT		

Emission Source / Control

Emission Unit	111111	Emission Source	A0004	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.
I	11,718			aeration room #4
Design Capacity	11340	Units Code	90	Desc
Control Type	Code		Desc	cubic feet
Waste Feed	Code		Desc	
Waste Type	Code		Desc	

Emission Unit	111111	Emission Source	A0005	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.
I				aeration room #5
Design Capacity	11340	Units Code	90	Desc
Control Type	Code		Desc	cubic feet
Waste Feed	Code		Desc	
Waste Type	Code		Desc	

Emission Unit	111111	Emission Source	A0006	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.
I				aeration room #6
Design Capacity	11340	Units Code	90	Desc
Control Type	Code		Desc	cubic feet
Waste Feed	Code		Desc	
Waste Type	Code		Desc	

Add:

Emission Unit 111111 Emission Source A0007

Source Type

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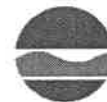
Aeration Room #7

Design Capacity 3.764

Units Code 90

cubic feet

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS ~~EO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Source / Control

Emission Unit	111111	Emission Source	A000X 1		Manufacturer's Name/Model No.
Source Type	Date of Construction	Date of Operation	Date of Removal		
I	125,963			aeration room #X 1	
Design Capacity	97200	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	A0008		Manufacturer's Name/Model No.
Source Type	Date of Construction	Date of Operation	Date of Removal		
I	78,000			aeration room # 8	
Design Capacity	97200	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	CATOX		Manufacturer's Name/Model No.
Source Type	Date of Construction	Date of Operation	Date of Removal		
K	07/01/1994			DONALDSON ABATOR	
Design Capacity	6000	Units Code	118	Desc	cubic feet per minute (standard conditions)
Control Type	Code	019	Desc	CATALYTIC AFTERBURNER	
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0001		Manufacturer's Name/Model No.
Source Type	Date of Construction	Date of Operation	Date of Removal		
I				sterilization chamber #1	
Design Capacity	1155	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0002		Manufacturer's Name/Model No.
Source Type	Date of Construction	Date of Operation	Date of Removal		
I				sterilization chamber #2	
Design Capacity	1155	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

New York State Department of Environmental Conservation
Air Permit Application



DEC ID: 5534400029

Application ID: 553440002900011

Renewal Number: 1

Facility: STERIGENICS ~~EO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Source / Control

Emission Unit	111111	Emission Source	S0003		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 3	
Design Capacity	1333	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0004		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	1,200			sterilization chamber #4	
Design Capacity	4455	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0005	Delete	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	Decommissioned → 2004			sterilization chamber # 5	
Design Capacity	1333	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0006		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 6	
Design Capacity	347	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0008		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 8	
Design Capacity	347	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

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Facility: STERIGENICS EQ INC U.S. LLC

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Section IV - Emission Unit Information

Emission Source / Control

Emission Unit	111111	Emission Source	S0009		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	1,200			sterilization chamber # 9	
Design Capacity	4455	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S0010B		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	2,996			sterilization chamber # 40 B	
Design Capacity	4455	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S00110C		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 41 C	
Design Capacity	1333	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S00120D		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 42 D	
Design Capacity	1333	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Emission Unit	111111	Emission Source	S00130E		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				sterilization chamber # 43 E	
Design Capacity	1333	Units Code	90	Desc	cubic feet
Control Type	Code		Desc		
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

New York State Department of Environmental Conservation
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Facility: STERIGENICS ~~EO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Source / Control

Emission Unit	111111	Emission Source	SCRUB		
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
K	07/01/1995			CEILCOTE MAE SPT-42-120	
Design Capacity		Units Code		Desc	
Control Type	Code	001	Desc	WET SCRUBBER	
Waste Feed	Code		Desc		
Waste Type	Code		Desc		

Process Information

Emission Unit	111111	Process	S01		
Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units		
31502001	Quantity / Hr	Quantity / Yr	Code	Description	
<input type="checkbox"/> Confidential	Operating Schedule		Building	Floor / Location	
<input type="checkbox"/> Operating At Maximum Capacity	Hrs / Day	Days / Yr			
<input type="checkbox"/> Activity w/ Insignificant Emission	24	365	PLANT		

Description

EVACUATION OF STERILIZATION CHAMBERS. THERE ARE ~~2~~ STERILIZATION CHAMBERS WHICH ARE CHARGED WITH ETHYLENE OXIDE GAS OR PROPYLENE OXIDE GAS TO STERILIZE MEDICAL EQUIPMENT, COSMETICS, SPICES OR PHARMACEUTICALS. AT THE END OF THE STERILIZATION PERIOD, THE GAS IS PUMPED OUT THROUGH A WET ACID SCRUBBER.

Emission Point Identifier(s)									
Emission Source / Control Identifier(s)									
S0001	S0002	S0003	S0004	S0005	S0006	S0008	S0009	S0010	S0011
S0012	S0013	SCRUB							

Emission Unit	111111	Process	S02		
Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units		
31502001	Quantity / Hr	Quantity / Yr	Code	Description	
<input type="checkbox"/> Confidential	Operating Schedule		Building	Floor / Location	
<input type="checkbox"/> Operating At Maximum Capacity	Hrs / Day	Days / Yr			
<input type="checkbox"/> Activity w/ Insignificant Emission	24	365	PLANT		

Description

EXHAUSTING STERILIZATION CHAMBERS. THERE ARE ~~2~~ STERILIZATION CHAMBERS WHICH ARE CHARGED WITH ETHYLENE OXIDE OR PROPYLENE OXIDE TO STERILIZE MEDICAL EQUIPMENT, COSMETICS, SPICES OR PHARMACEUTICALS. AFTER THE STERILIZATION PERIOD AND EVACUATION CYCLES OF PROCESS S01 ARE COMPLETED, THE CHAMBER VACUUM IS BROKEN AND THE CHAMBER IS VENTED THROUGH A CATALYTIC OXIDIZER.

Emission Point Identifier(s)									
Emission Source / Control Identifier(s)									
CATOX	S0001	S0002	S0003	S0004	S0005	S0006	S0008	S0009	S0010
S0011	S0012	S0013	Delete						

New York State Department of Environmental Conservation
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Facility: STERIGENICS ~~CO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Process Information

Emission Unit	111111	Process	S03
Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units
31502001	Quantity / Hr	Quantity / Yr	Code
Confidential	Operating Schedule		Building
Operating At Maximum Capacity	Hrs / Day	Days / Yr	Floor / Location
Activity w/ Insignificant Emission	24	365	PLANT

6

Description

AERATION ROOM VENTING. THERE ARE 6 AERATION ROOMS WHERE PRODUCTION MATERIALS ARE STAGED AFTER STERILIZATION. THE MATERIALS OFFGAS ETHYLENE OXIDE OR PROPYLENE OXIDE FOR AN APPROPRIATE PERIOD OF TIME AND THE ROOMS ARE EXHAUSTED THROUGH A CATALYTIC OXIDIZER.

Emission Point Identifier(s)						
Emission Source / Control Identifier(s)						
<table border="1"> <tr> <td>A0004</td> <td>A0005</td> <td>A0006</td> <td>A0007</td> <td>A0008</td> <td>CATOX</td> </tr> </table>	A0004	A0005	A0006	A0007	A0008	CATOX
A0004	A0005	A0006	A0007	A0008	CATOX	

Add A0001

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Facility: STERIGENICS CO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit		1-1111		Emission Point		Process		Emission Source		
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	63	O	363						
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The owner or operator shall conduct an initial performance test using the test methods listed in 40 CFR 63.365. The test must be completed not later than 31 March 2000.

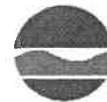
Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> INTERMITTENT EMISSION TESTING				
Work Practice		Process Material		Ref Test Method
Type	Code	Description		
				EPA Method 18
Parameter		Manufacturer Name/Model No.		
Code	Description			
Limit		Limit Units		
Upper	Lower	Code	Description	
	99	332	percent reduction by weight	
Averaging Method	Code	20	Desc	AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATE
Monitoring Freq	Code	13	Desc	SINGLE OCCURRENCE
Reporting Reqs	Code	01	Desc	ONCE / BATCH OR MONITORING OCCURRENCE

New York State Department of Environmental Conservation
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Facility: STERIGENICS ~~CO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process		Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	item
40	CFR	63	O	364	b	2				
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

Measure and record once per week the level of the scrubber liquor in the recirculation tank. The owner or operator shall install, maintain and use a liquor level indicator to measure the scrubber liquor tank level. The maximum liquor tank level will be established during the initial testing.

Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
		Parameter		Manufacturer Name/Model No.	
Code		Description			
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method	Code		Desc		
Monitoring Freq	Code	04	Desc	WEEKLY	
Reporting Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)	

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Facility: STERIGENICS EQ INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process		Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	63	O	364	c					
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The owner or operator shall continuously monitor and record the oxidation temperature at the outlet of the catalyst bed. The baseline oxidation temperature will be established during initial testing.

Contaminants

Capping	CAS No.	Contaminant Name
<input checked="" type="checkbox"/>	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
Parameter		Manufacturer Name/Model No.			
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method	Code	Desc			
Monitoring Freq	Code	01	Desc	CONTINUOUS	
Reporting Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)	

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Facility: STERIGENICS ~~EO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit		1-11111		Emission Point		Process		Emission Source		
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	63	O	366	a	3				
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The owner or operator shall submit a semiannual monitoring system performance report. Reports of exceedences of control system parameters shall include information required in 40 CFR 63.10(c).

Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

☒ RECORD KEEPING/MAINTENANCE PROCEDURES

Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
		Parameter		Manufacturer Name/Model No.	
Code		Description			
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method	Code	Desc			
Monitoring Freq	Code	14	Desc	AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION	
Reporting Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)	

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit		1-11111		Emission Point		Process		Emission Source			
Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item	
6	NYCRR	200		6							
<input checked="" type="checkbox"/> Applicable Federal Requirement											

Description

The rolling annual usage of ethylene oxide shall not exceed 550,000 pounds per year.

Contaminants

Capping	CAS No.	Contaminant Name
T	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
Parameter				Manufacturer Name/Model No.	
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method	Code	17	Desc	ANNUAL MAXIMUM ROLLED MONTHLY	
Monitoring Freq	Code	05	Desc	MONTHLY	
Reporting Reqs	Code	10	Desc	UPON REQUEST BY REGULATORY AGENCY	

New York State Department of Environmental Conservation
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Facility: STERIGENICS EO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process		Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	200		6						
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The rolling annual usage of propylene oxide shall not exceed 6000 pounds per year.

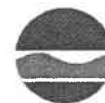
Contaminants

Capping	CAS No.	Contaminant Name
	000075-56-9	PROPANE, 1,2-EPOXY-

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES				
Work Practice		Process Material		Ref Test Method
Type	Code	Description		
Parameter		Manufacturer Name/Model No.		
Code	Description			
Limit		Limit Units		
Upper	Lower	Code	Description	
Averaging Method	Code	17	Desc	ANNUAL MAXIMUM ROLLED MONTHLY
Monitoring Freq	Code	05	Desc	MONTHLY
Reporting Reqs	Code	10	Desc	UPON REQUEST BY REGULATORY AGENCY

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Facility: STERIGENICS EO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process	S01	Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	212		4	a					
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The exhaust from the evacuation of the sterilization chambers shall be directed through a control device that achieves 99.9% control of ethylene oxide emissions.

Contaminants

Capping	CAS No.	Contaminant Name
1	000075-56-9	PROPANE, 1,2-EPOXY-

Monitoring Information

<input checked="" type="checkbox"/> MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
04				EPA Method 18	
		Parameter		Manufacturer Name/Model No.	
Code	Description				
202	ETHYLENE OXIDE				
Limit		Limit Units			
Upper	Lower	Code	Description		
	99.9	332	percent reduction by weight		
Averaging Method	Code	20	Desc	AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATE	
Monitoring Freq	Code	12	Desc	PER BATCH OF PRODUCT/RAW MATERIAL CHANGE	
Reporting Reqs	Code	10	Desc	UPON REQUEST BY REGULATORY AGENCY	

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Facility: STERIGENICS EO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process	S01	Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	212		4	a					
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The exhaust from the evacuation of the sterilization chambers shall be directed through a control device which achieves at least 99.9% control. Initial testing should be concurrent with testing required under 40CFR 63 Subpart O. Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> INTERMITTENT EMISSION TESTING					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
				EPA Method 18	
Parameter		Manufacturer Name/Model No.			
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
	99.9	332	percent reduction by weight		
Averaging Method	Code	20	Desc	AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATE	
Monitoring Freq	Code	14	Desc	AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION	
Reporting Reqs	Code	01	Desc	ONCE / BATCH OR MONITORING OCCURRENCE	

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Facility: STERIGENICS ~~CO INC~~ U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-1111	Emission Point		Process	S02	Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	63	O	362	e	1				
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The exhaust from backventing sterilization chambers shall be directed through a control device which achieves 99% control. Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> INTERMITTENT EMISSION TESTING				
Work Practice		Process Material		Ref Test Method
Type	Code	Description		
				EPA Method 18
Parameter		Manufacturer Name/Model No.		
Code	Description			
Limit		Limit Units		
Upper	Lower	Code	Description	
	99	332	percent reduction by weight	
Averaging Method	Code	20	Desc AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATE	
Monitoring Freq	Code	14	Desc AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION	
Reporting Reqs	Code	01	Desc ONCE / BATCH OR MONITORING OCCURRENCE	

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Facility: STERIGENICS EQ INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process	S02	Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	212		4	a					
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The exhaust from backventing sterilization chambers shall be directed through a control device which achieves at least 99% control of ethylene oxide emissions

Contaminants

Capping	CAS No.	Contaminant Name
	000075-56-9	PROPANE, 1,2-EPOXY-

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES				
Work Practice		Process Material		Ref Test Method
Type	Code	Description		
Parameter			Manufacturer Name/Model No.	
Code	Description			
Limit		Limit Units		
Upper	Lower	Code	Description	
Averaging Method	Code	Desc		
Monitoring Freq	Code	12	Desc	PER BATCH OF PRODUCT/RAW MATERIAL CHANGE
Reporting Reqs	Code	10	Desc	UPON REQUEST BY REGULATORY AGENCY

New York State Department of Environmental Conservation
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Facility: STERIGENICS CO INC U.S. LLC

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Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process	S03	Emission Source				
Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	63	O	362	d					
<input checked="" type="checkbox"/> Applicable Federal Requirement										

Description

The exhaust from the aeration rooms shall be directed through a control device which shall achieve 99% control or reduce the concentration to a maximum of 1 ppmv (whichever is less stringent). Testing frequency will be once during the term of the permit unless changed by the permitting authority.

Contaminants

Capping	CAS No.	Contaminant Name
	000075-21-8	ETHYLENE OXIDE

Monitoring Information

<input checked="" type="checkbox"/> INTERMITTENT EMISSION TESTING				
Work Practice		Process Material		Ref Test Method
Type	Code	Description		
				EPA Method 18
Parameter		Manufacturer Name/Model No.		
Code	Description			
Limit		Limit Units		
Upper	Lower	Code	Description	
	99	332	percent reduction by weight	
Averaging Method	Code	20	Desc AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATE	
Monitoring Freq	Code	14	Desc AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION	
Reporting Reqs	Code	01	Desc ONCE / BATCH OR MONITORING OCCURRENCE	

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Facility: STERIGENICS HOLDING U.S. LLC

Section IV - Emission Unit Information

Emission Unit Compliance Certification

Emission Unit	1-11111	Emission Point		Process	S03	Emission Source	
Rule Citation							
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag
6	NYCRR	212		4	a		
<input checked="" type="checkbox"/> Applicable Federal Requirement							

Description

The exhaust from the aeration rooms shall be directed through a control device which achieves at least 99% control of ethylene oxide emissions.

Contaminants

Capping	CAS No.	Contaminant Name
1	000075-56-9	PROPANE, 1,2-EPOXY-

Monitoring Information

<input checked="" type="checkbox"/> RECORD KEEPING/MAINTENANCE PROCEDURES					
Work Practice		Process Material		Ref Test Method	
Type	Code	Description			
		Parameter		Manufacturer Name/Model No.	
Code		Description			
Limit		Limit Units			
Upper	Lower	Code	Description		
Averaging Method	Code	Desc			
Monitoring Freq	Code	12	Desc	PER BATCH OF PRODUCT/RAW MATERIAL CHANGE	
Reporting Reqs	Code	10	Desc	UPON REQUEST BY REGULATORY AGENCY	

Process Emissions Summary

Emission Unit	1-11111	Process	S01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
000075-21-8	ETHYLENE OXIDE						458	04
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
0.44	522.5			06	0.44	505		



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Section IV - Emission Unit Information

Process Emissions Summary

Emission Unit	1-11111	Process	S01				ERP	ERP How
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	(lb/hr)	Determined
000075-56-9	PROPANE, 1,2-EPOXY-						458	04
PTE			Standard Units	PTE How Determined		Actual		
(lb/hr)	(lb/yr)	(standard units)				(lb/hr)	(lb/yr)	
0.44	5.7			06		0.44	5.7	

Emission Unit	1-11111	Process	S02				ERP	ERP How
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	(lb/hr)	Determined
000075-21-8	ETHYLENE OXIDE						4.5	04
PTE			Standard Units	PTE How Determined		Actual		
(lb/hr)	(lb/yr)	(standard units)				(lb/hr)	(lb/yr)	
0.044	55			06		0.044	53	

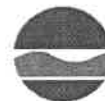
Emission Unit	1-11111	Process	S02				ERP	ERP How
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	(lb/hr)	Determined
000075-56-9	PROPANE, 1,2-EPOXY-						4.5	04
PTE			Standard Units	PTE How Determined		Actual		
(lb/hr)	(lb/yr)	(standard units)				(lb/hr)	(lb/yr)	
0.044	0.6			06		0.044	0.6	

Emission Unit	1-11111	Process	S03				ERP	ERP How
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	(lb/hr)	Determined
000075-21-8	ETHYLENE OXIDE						18	04
PTE			Standard Units	PTE How Determined		Actual		
(lb/hr)	(lb/yr)	(standard units)				(lb/hr)	(lb/yr)	
0.18	220			06		0.18	213	

Emission Unit	1-11111	Process	S03				ERP	ERP How
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	(lb/hr)	Determined
000075-56-9	PROPANE, 1,2-EPOXY-						18	04
PTE			Standard Units	PTE How Determined		Actual		
(lb/hr)	(lb/yr)	(standard units)				(lb/hr)	(lb/yr)	
0.18	2.4			06		0.18	2.4	

Emission Unit Emissions Summary

Emission Unit	1-11111						
CAS No.	Contaminant Name						
000075-21-8	ETHYLENE OXIDE						
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)			
550000	0.66	798	0.66	771			



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Section IV - Emission Unit Information

Emission Unit Emissions Summary

Emission Unit	1-11111				
CAS No.	Contaminant Name				
000075-56-9	PROPANE, 1,2-EPOXY-				
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)	
6000	0.66	9	0.66	9	

Emission Unit Description

Emission Unit	111112
FOUR 12MMBTU/HR NATURAL GAS FIRED HEATERS HEAT THE WAREHOUSE.	

Process Information

Emission Unit	111112	Process	B01		
Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units		
	Quantity / Hr	Quantity / Yr	Code	Description	
<input type="checkbox"/> Confidential	Operating Schedule		Building	Floor / Location	
<input type="checkbox"/> Operating At Maximum Capacity	Hrs / Day	Days / Yr			
<input type="checkbox"/> Activity w/ Insignificant Emission	PLANT				

Description

HEATING THE WAREHOUSE.

Emission Point Identifier(s)
Emission Source / Control Identifier(s)

Emission Unit Applicable Federal Requirements

Emission Unit		1-11112		Emission Point		Process		Emission Source		
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	227	1	3	a					

New York State Department of Environmental Conservation
Air Permit Application



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Supporting Documentation

- ☐ Aerial Photo (__ / __ / __)
- ☐ Air Quality Model (__ / __ / __)
- ☐ Air State Facility Permit (__ / __ / __)
- ☐ Air Title V Facility Permit (__ / __ / __)
- ☐ Alternative Fuel Monitoring Schedule (__ / __ / __)
- ☐ Ambient Air Monitoring Plan (__ / __ / __)
- ☐ Analysis of Contemporaneous Emission Increase/Decrease (__ / __ / __)
- ☐ Article 11, Title 5 Permit for Interference with Fish & Wildlife (__ / __ / __)
- ☐ Authorized Agent Letter (__ / __ / __)
- ☐ BACT Demonstration (__ / __ / __)
- ☐ Baseline Period Demonstration (__ / __ / __)
- ☐ Blasting Chart - Ground Vibration Limits (__ / __ / __)
- ☐ Building Identification Table (__ / __ / __)
- ☐ Calculations (__ / __ / __)
- ☐ Capping Letter/Package (__ / __ / __)
- ☐ Certificate of Capacity (Resource Recovery Facility) (__ / __ / __)
- ☐ Compliance Assurance Monitoring Plan (CAM) (__ / __ / __)
- ☐ Confidentiality Justification (__ / __ / __)
- ☐ Construction and Demolition Debris Tracking Document (__ / __ / __)
- ☐ Construction Detail Drawings (__ / __ / __)
- ☐ Continuous Emissions Monitoring Plans/QA/QC (__ / __ / __)
- ☐ Control Equipment Layout (__ / __ / __)
- ☐ Custom Schedule for Fuel Nitrogen and Sulfur Monitoring (__ / __ / __)
- ☐ Drawings/Blueprints (__ / __ / __)
- ☐ Elevations/Sections (__ / __ / __)
- ☐ Emission Inventory Report (__ / __ / __)
- ☐ Emission Survey (__ / __ / __)
- ☐ Emission Unit Summary (__ / __ / __)
- ☐ EPA Memo Re: Technical Infeasibility of Monitoring Nitrogen in Fuel (__ / __ / __)
- ☐ Episode Action Plan (__ / __ / __)
- ☐ Equipment Manufacturers Information (__ / __ / __)
- ☐ ERC Quantification (__ / __ / __)
- ☐ Exemption Related Document (__ / __ / __)
- ☐ Existing Certificates to Operate and/or Permits to Construct (__ / __ / __)
- ☐ Existing Consent Order (__ / __ / __)
- ☐ Existing Methane Migration & Recovery Well Plan (__ / __ / __)
- ☐ Existing Permit Figures (__ / __ / __)
- ☐ Facility Location Map (__ / __ / __)
- ☐ Facility-Wide Operating Permit Submittal Schedule (__ / __ / __)
- ☐ Fugitive Dust Control Plan (__ / __ / __)
- ☐ General Flow Diagram (__ / __ / __)
- ☐ Generating Plant Site & Section Sheet (__ / __ / __)
- ☐ LAER Demonstration (__ / __ / __)
- ☐ Letter of Intent to Commence Work (__ / __ / __)
- ☐ List of Exempt Activities (form attached) (__ / __ / __)

New York State Department of Environmental Conservation
Air Permit Application



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Supporting Documentation

- ☐ MACT Demonstration (__ / __ / __)
- ☐ Methods Used To Determine Compliance (form attached) (__ / __ / __)
- ☐ Miscellaneous Attachments - Not Otherwise Specified (__ / __ / __)
- ☐ Miscellaneous Correspondence (__ / __ / __)
- ☐ Mitigation Planting Plan (__ / __ / __)
- ☐ MSDS Information Sheets (__ / __ / __)
- ☐ Non-CEM: Custom Monitoring, Recordkeeping and/or Reporting Plan (__ / __ / __)
- ☐ Notice Covenant (__ / __ / __)
- ☐ Notice of Intent to Commence Work (__ / __ / __)
- ☐ NOx RACT Compliance Plan (__ / __ / __)
- ☐ NOx RACT Operating Plan (__ / __ / __)
- ☐ Opacity Compliance Plan (__ / __ / __)
- ☐ Operational Flexibility: Desc of Alternative Operating Scenarios and Protocols (__ / __ / __)
- ☐ P.E. Certification (form attached) (__ / __ / __)
- ☐ Permit Sign (__ / __ / __)
- ☐ Pesticide Treatment Area Map (__ / __ / __)
- ☐ Photograph(s) (__ / __ / __)
- ☐ Plot Plan (__ / __ / __)
- ☐ Process Flow Diagram(s) (__ / __ / __)
- ☐ Process Material Specification Data (__ / __ / __)
- ☐ Process Operation Log Sheet(s) (__ / __ / __)
- ☐ Project Location Map (__ / __ / __)
- ☐ PSD Permit Correlation Tables (__ / __ / __)
- ☐ RACT Demonstration (__ / __ / __)
- ☐ Regulatory Analysis Summary (__ / __ / __)
- ☐ Results of SEQR Review (__ / __ / __)
- ☐ Seed Mixture Recommendations (__ / __ / __)
- ☐ Short Environmental Assessment Form (__ / __ / __)
- ☐ Site Plan (__ / __ / __)
- ☐ Solid Waste Annual Report Form (__ / __ / __)
- ☐ SPDES Permit (__ / __ / __)
- ☐ Stack Test Protocols/Reports (__ / __ / __)
- ☐ Title IV Acid Rain Permit Application (__ / __ / __)
- ☐ VOC RACT Compliance Plan (__ / __ / __)
- ☐ Wood Waste Specifications (__ / __ / __)